DOCKET FILE COPY ORIGINAL **ORIGINAL**

WILKINSON BARKER KNAUER, LLP

Washington, DC
Frankfurt, Germany

2300 N Street, NW
Washington, DC 20037-1128

telephone: 202.783.4141
facsimile: 202.783.5851
www.wbklaw.com

RECEIVED

AUG 2 1999

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

August 2, 1999

Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W., Room TW-A325
Washington, D.C. 20554

Re: CellNet Data Systems, Inc.
Comments on WT Docket No. 99-87

Dear Ms. Salas:

Please find enclosed, on behalf of CellNet Data Systems, Inc., an original and six copies of its Comments filed in the above-referenced proceeding.

Should you have any questions regarding this submission, please contact the undersigned.

Sincerely,

WILKINSON BARKER KNAUER, LLP

Jeffrey S. Cohen

By: Lawrence J. Movshin
Timothy J. Cooney
Jeffrey S. Cohen

Enclosures

cc: D'wana R. Terry, Chief, Public Safety and Private Wireless Division
Amy Zoslov, Chief, Auctions and Industry Analysis Division
Mr. Gary D. Michaels, Auctions and Industry Analysis Division

No. of Copies rec'd 0+6
List ABCDE

ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Sections 309(j) and 337 of the Communications Act of 1934, as Amended	)	**WT Docket No. 99-87**
	)	
Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies	)	**RM-9332**
	)	
Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz	)	

To: The Commission

COMMENTS OF CELLNET DATA SYSTEMS, INC.

Lawrence J. Movshin
Timothy J. Cooney
Jeffrey S. Cohen

WILKINSON BARKER KNAUER, LLP
2300 N Street, N.W., Suite 700
Washington, D.C. 20037-1128
(202) 783-4141

Its Attorneys

August 2, 1999

TABLE OF CONTENTS

SUMMARY

CellNet Data Systems, Inc. ("CellNet") has a significant interest in this proceeding in which the Commission seeks comment on what changes, if any, to the Commission's rules and policies governing private wireless spectrum are necessary or appropriate to implement the 1997 statutory changes to the Commission's auction authority. CellNet is a private, fixed wireless licensee of Part 101 Multiple Address Systems ("MAS") that has obtained its licensed spectrum via the Commission's traditional, first-come, first-served license assignment procedures with prior frequency coordination. CellNet submits that the current system has worked well to date and should not be replaced with a geographic area based licensing scheme with spectrum auctions.

Despite the revisions to the Commission's auction authority which Congress enacted in 1997, the Commission's statutory obligation to avoid mutual exclusivity remains unchanged. Indeed, this responsibility has been heightened by Congress in the revised statutory provision. As the Commission itself has noted, the traditional approach to the licensing of private wireless spectrum generally does not result in the filing of mutually exclusive applications, the prerequisite for the Commission's exercise of its auction authority. The Commission would be going in the wrong direction, therefore, if it were to implement a system of geographic licensing since such a system would necessarily create mutual exclusivity, and thus the need for competitive bidding. In addition, most private wireless frequency bands are heavily encumbered, and consist of myriad types of licensees with specialized and unique uses. Thus, imposing a geographic licensing system would be incompatible with private wireless operations, which by their nature are intended to support individual licensees' underlying business operations and are not necessarily focused on large service areas covering wide segments of the population.

If, however, the Commission were to determine that certain private wireless services are subject to competitive bidding, it should apply the public safety radio services exemption broadly and fairly, consistent with the expansive language of the statute and the legislative history. Thus, no distinction should be made between entities such as utilities that use private wireless spectrum to serve public safety functions, and the companies that utilize spectrum to provide the same public safety services to utilities on a third party basis. Furthermore, to the extent that any entity eligible for the public safety radio service exemption (including utilities and third-party providers like CellNet) can provide statutorily exempt services on a spectrally efficient basis, it also should be allowed to utilize any extra network capacity for non-exempt services, including the lease of capacity on a private carriage basis (provided that the majority of the services provided are for public safety purposes).

If the Commission were to adopt geographic licensing for private wireless services — which it should not do — it at least should treat heavily encumbered spectrum bands differently than lightly encumbered ones. It would be appropriate to use smaller geographic areas like EAs in encumbered bands where various incumbents may be interested only in small slivers of white space, because the use of smaller areas will result in fewer instances of mutual exclusivity. On the other hand, for new frequency bands or those not presently encumbered, larger geographic areas may be utilized to maximize service flexibility.

CellNet strongly opposes the adoption of an application freeze for private wireless spectrum in those frequency bands in which incumbents already have licenses. Such freezes, like the current freeze on MAS license applications, have an often devastating effect on current operations, especially in the private wireless context which is characterized by public safety use and on-going

commercial obligations. The specialized nature of private wireless systems mitigates the threat of speculative filings that are the basis for imposing freezes. Other much less onerous alternatives to freezes are available, such as more restrictive construction periods or requirements to document internal needs or contractual requirements.

Finally, to the extent the Commission considers itself obligated to generate some revenue from new private wireless assignments, CellNet would support an appropriately tailored, market-based program of spectrum fees in lieu of auctions. Although CellNet recognizes that Congressional authorization would be needed for such a program, it notes that spectrum fees would encourage efficient spectrum use without creating the many problems associated with auctioning heavily encumbered private spectrum bands.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Sections 309(j) and 337 of the Communications Act of 1934, as Amended	)	**WT Docket No. 99-87**
	)	
Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies	)	**RM-9332**
	)	
Establishment of Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz	)	

To: The Commission

COMMENTS OF CELLNET DATA SYSTEMS, INC.

CellNet Data Systems, Inc. ("CellNet"), by its attorneys, and pursuant to section 1.415 of the Commission's Rules, hereby files its comments on the Notice of Proposed Rule Making, released March 25, 1999, FCC 99-52 ("Notice") in the above-captioned proceeding. The purpose of the Notice is to seek comment on what changes, if any, to the Commission's rules and policies governing private wireless spectrum are necessary or appropriate to implement statutory changes to the Commission's auction authority.

I. CELLNET HAS A SIGNIFICANT INTEREST IN THE OUTCOME OF THIS PROCEEDING

CellNet, through its various wholly-owned subsidiaries, deploys, owns, and operates Multiple Address System ("MAS") networks throughout the service areas of gas, electric, and water utility companies. MAS is a "private," non-common carrier point-to-multipoint service licensed under Part 101 of the Commission's rules and used for fixed or mobile one-way or two-way communications. The MAS networks licensed to CellNet in the 928/952 MHz bands are used by CellNet to provide remote meter reading information services to its utility customers. CellNet utilizes unlicensed Part 15 devices to collect meter data from thousands of endpoints (electric, gas or water meters retrofitted with Part 15 transmitters). This data is then collected by an MAS wide area network, which is then transmitted via wireline to centralized computer systems where the information is processed by CellNet to provide value-added information services to the utility customer.

In order to read data from upwards of one million meters in a given metropolitan area, CellNet has developed MAS technology unique to its information services networks which achieves spectrum efficiencies that vastly exceed any other MAS system. CellNet's MAS architecture is cellular-based, with substantial reuse of the same frequencies within the service area to greatly multiply the number of remotes that can simultaneously utilize the channel.[1] CellNet currently has

---

[1] CellNet's design allows the deployment of multiple MAS master stations operating on various subchannels, capable of serving up to 200 remote stations per master station, as compared to the minimum of four remotes per master station required by the Commission's rules. Each remote, in turn, can communicate with hundreds of endpoint devices.

4.3 million endpoint devices under contract, and more than 2.8 million devices on-line.[2]

As a result of CellNet's network deployments, its utility customers reap many public safety benefits, including the availability of fraud/theft detection, outage detection, and restoration detection. Furthermore, the utility can access daily usage, total usage, and time of last meter read data, helping the utility to resolve service issues immediately. CellNet's information services network also provides cost-effective metering services, resulting in consumer benefits including flexible rate programs designed to help them save money on energy consumption, energy usage information to help manage energy costs and to better allocate usage, reductions in the quantity and duration of outages, consolidated billing services, and flexible billing dates.

In order for CellNet to expand its service offerings with its current utility customers, and provide services to future customers, it requires continued access to spectrum in the 928/952 MHz MAS bands. CellNet's primary concern in this proceeding is that it not be foreclosed from filling out and expanding its current and planned service areas by the adoption of new service rules purportedly intended to implement the 1997 Budget Act.[3]

---

[2] CellNet has contracts or commitments for its information services in the Barberton, OH, Hartford, CT, Indianapolis, IN, Kansas City, MO, Los Angeles, CA, Minneapolis-St. Paul, MN, Pittsburgh, PA, Philadelphia, PA, San Diego, CA, San Francisco, CA, St. Louis, MO, and Seattle, WA metropolitan areas.

[3] CellNet also has actively participated in the Commission's prior MAS rulemaking proceedings. See, e.g., Comments of CellNet Data Systems, Inc., WT Docket No. 97-81, April 21, 1997; Reply Comments of CellNet Data Systems, Inc., WT Docket No. 97-81, May 16, 1997.

II. STATUTORY BACKGROUND

As initially enacted as part of the Omnibus Budget Reconciliation Act of 1993,[4] § 309(j) of the Communications Act of 1934, as amended, ("the Communications Act") authorized, but did not require, the Commission to use competitive bidding to choose among "mutually exclusive" applications for initial licenses or construction permits.[5] The Commission has determined that applications are "mutually exclusive" if the grant of one application effectively would preclude the grant of one or more other applications.[6] Section 309(j)(6)(E) of the Communications Act, however, required the Commission to use engineering solutions, negotiation, threshold qualifications, service regulations and other means to avoid mutual exclusivity if the public interest would be served.

Section 309(j)(2) previously limited the Commission's auction authority to those wireless services where

> (A) the principal use of such spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers in return for which the licensee - - (i) enables those subscribers to receive communications signals that are transmitted utilizing frequencies on which the licensee is licensed to operate; or (ii) enables those subscribers to transmit directly communications signals utilizing frequencies on which the licensee is licensed to operate.

In the Competitive Bidding Second Report and Order, the Commission determined that a number of services were not subject to auctions, including private radio services used by government or

---

4 Pub. L. No. 103-66, Title VI, § 6002(a), 107 Stat. 312, 387-388 (1993).

5 47 U.S.C. § 309(j)(l)(1996).

6 Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Second Report and Order, PP Docket No. 93-253, 9 FCC Rcd 2348, 2350 n.5 (1993).

business entities to meet internal communications needs.[7]

Congress significantly revised the Commission's auction authority when it enacted the Balanced Budget Act of 1997.[8] Among other things, Congress eliminated the restriction that auctions be used only when the primary use of the spectrum involves the provision of subscriber-based services. The 1997 Act instead requires the Commission to auction all categories of spectrum for which there are mutually exclusive applications, other than those expressly exempt by the legislation. The relevant provisions of the auction statute now read as follows:

> 309(j)(1) General Authority. - - If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.
>
> (2) Exemptions. - - The competitive bidding authority granted by this subsection shall not apply to licenses or construction permits issued by the Commission--
>
> (A) for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-profit organizations, that - -
>
> (i) are used to protect the safety of life, health, or property; and
>
> (ii) are not made commercially available to the public;[9]

Paragraph (6)(E) referenced in revised § 309(j)(1) is the same provision enacted in 1993 in

---

7 Id. at 2354.

8 Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997).

9 47 U.S.C. § 309(j)(1), (2) (as amended by the Balanced Budget Act, § 3002).

which Congress requires the Commission to avoid mutual exclusivity of applications in the licensing process by using engineering solutions, negotiation, threshold qualifications, service regulations and other means, when to do so is in the public interest.[10]

To implement the new statutory provisions governing auctions, the Commission seeks comment on which radio services or classes of services Congress intended to exempt from competitive bidding and whether spectrum licenses for non-exempt wireless services are auctionable.

III. CONSISTENT WITH ITS STATUTORY OBLIGATION, THE COMMISSION SHOULD RETAIN ITS CURRENT SITE-BY-SITE LICENSING APPROACH FOR PRIVATE WIRELESS SERVICES TO AVOID MUTUAL EXCLUSIVITY BECAUSE MOST PRIVATE WIRELESS SERVICES, ESPECIALLY ALL HIGHLY ENCUMBERED BANDS, ARE NOT SUITED FOR GEOGRAPHIC LICENSING AND AUCTIONS

The variety of private wireless users mirrors the diversity of American businesses. Private communication systems generally are designed to serve the specific, unique communication needs of the operator of the system. As the Commission has noted, private internal systems are traditionally operated by licensees who require highly customized facilities for their personnel to use in the conduct of the licensees' underlying businesses.[11]

The Commission historically has employed site-by-site, first-come-first-served license

---

[10] See H.R. Conf. Rep. No. 105-217, at 572 (1997) ("Conference Report") ("[T]he conferees emphasize that, notwithstanding its expanded auction authority, the Commission must still ensure that its determinations regarding mutual exclusivity are consistent with the Commission's obligations under section 309(j)(6)(E). The conferees are particularly concerned that the Commission might interpret its expanded competitive bidding authority in a manner that minimizes its obligations under section 309(j)(6)(E), thus overlooking engineering solutions, negotiations, or other tools that avoid mutual exclusivity.").

[11] Notice at ¶ 31. See also Implementation of Sections 3(n) and 332 of the Communications Act, Second Report and Order, GN Docket No. 93-252, 9 FCC Rcd 1411, 1428 (1994) ("CMRS Second Report and Order").

assignment procedures for the private wireless services, including Part 101 MAS. All applications must be prior frequency coordinated; and if the minimum separation criteria are not met, applicants may enter into agreements to "short-space" the proposed facilities with other licensed or applied-for stations. The needs of the diverse group of private wireless users for the most part have been accommodated through these licensing procedures. Moreover, the Notice finds that because private wireless frequencies are assigned on a first-come, first-served basis and/or subject to frequency coordination, "[t]he traditional approach to the licensing of users of private spectrum generally does not result in the filing of mutually exclusive applications."[12]

Despite this finding, the Commission seeks comment on proposals for the replacement of site-by-site licensing with geographic licensing for private wireless bands. By doing so, the Commission is heading in the wrong direction. The replacement of site-by-site licensing by a geographic licensing method would create mutual exclusivity among private applicants where the parties otherwise might have employed engineering solutions to accommodate each business' needs. For this reason alone, employment of a geographic licensing scheme would be directly contrary to the Commission's statutory mandate under §§ 309(j)(1) and (6)(E) to employ engineering solutions or other means to avoid instances of mutual exclusivity and the potential need for auctions.

Indeed, in December 1998 several members of Congress reminded the Commission of its statutory obligation to avoid mutual exclusivity. Six Congressional leaders wrote the Chairman to remind him that Congress was "concerned that the Commission was ignoring its obligations under Section 309(j)(6(E)" and that Congress "did not engage in an idle act" when it reaffirmed the

---

12 Notice at ¶13.

Commission's responsibility to avoid mutual exclusivity in licensing.[13]

Even if the auctions potentially resulting from mutual exclusivity were not a concern, the private wireless bands are not well suited to the Commission's tentative proposal of employing geographic licensing. In contrast with commercial mobile radio services, which are marketed across larger geographic markets and emphasize widespread coverage areas and roaming capabilities, the systems of private wireless licensees typically need to cover geographic areas specifically designed for the needs of their unique businesses. For example, some industrial users may require the deployment of systems to cover several plants located on a single campus, while other industrial users may require systems to cover geographically dispersed plants. Utilities, on the other hand, may require systems covering more extensive service areas, including entire cities, suburbs and remote areas, but do not require roaming.

Any geographic licensing scheme for private wireless systems, however, necessarily would rely on arbitrarily defined borders rather than on boundaries determined by the actual needs of the business. For example, if the Commission employed geographic licensing for MAS frequencies on an MTA basis, such an area might very well not cover the entire service area of a particular utility customer, and may include much area falling outside of the service area of this utility where CellNet does not have a contractual relationship to provide its information services. The utilities themselves, of course, would face the same situation if their service areas did not match Commission-defined

---

[13] Letter to Chairman William Kennard from Rep. John Dingell (D-MI), ranking minority member of the House Commerce Committee, Rep. Billy Tauzin (R-LA), Chairman of the Telecommunications, Trade, and Consumer Protection Subcommittee of the House Commerce Committee, Senate Minority Leader Thomas Daschle (D-SD), and Senate Commerce, Science, and Transportation Committee members Sen. John Breaux (D-LA), Sen. Spencer Abraham (R-MI), and Sen. Slade Gorton (R-WA) (Dec. 22, 1998) at 2.

geographic areas.

Geographic licensing and auctions are particularly unsuitable for highly encumbered private wireless bands like the 928/952 MHz MAS bands. In these bands, most of the urban and suburban areas already are saturated with incumbents, and the few unserved areas are characterized by random sizes and shapes. These white spaces may be valuable to incumbents or to a new private business licensee who does not need wide area coverage, but would have little operational value for a prospective geographic licensee. Indeed, the little white space that remains in the middle or edges of congested areas likely cannot be developed by new operators without causing interference to operating incumbents. Because of the scarcity of usable white space, the Commission should expect to recover little revenue from an auction of spectrum in these particular bands. On the other hand, such an auction may attract unsophisticated bidders who do not realize how highly encumbered the spectrum is, or speculators who do not intend to construct new facilities but who will try to leverage value from their geographic licenses from their ability to block even marginal expansion of incumbents' systems.

IV. ANY PRIVATE WIRELESS LICENSEE THAT USES ITS SPECTRUM FOR PUBLIC SAFETY SERVICES IS ENTITLED TO THE STATUTORY EXEMPTION FROM AUCTIONS

In the event the Commission decides to employ auctions for private wireless spectrum — which the Commission should not do for any currently encumbered bands — § 309(j)(2)(A) of the Communications Act exempts from the competitive bidding requirement those licenses which are used:

> (A) for public safety radio services, including private internal radio services used by State and local governments and non-government entities and including emergency road services provided by not-for-

> profit organizations, that - - (i) are used to protect the safety of life, health or property; and (ii) are not made commercially available to the public.[14]

In implementing this exemption, the Commission may not arbitrarily limit the class of licensees that fit under the statutory criteria for public safety radio services. The statute is written to exempt specified classes of "services," no matter who provides them. In codifying the exemption, therefore, the Commission must ensure that the exemption is broad enough such that companies like CellNet, which satisfy all of the elements of the statutory provision, are exempt from being required to participate in auctions to obtain additional MAS spectrum.

A. Private Internal Radio Service

The Commission proposes to define a private internal radio service as "a service in which the licensee does not receive compensation, and all messages are transmitted between fixed operating positions located on premises controlled by the licensee and the associated fixed or mobile stations or other transmitting or receiving devices of the licensee."[15] This proposed definition goes well beyond the statutory language, and CellNet questions whether it is appropriate for the Commission to define a statutory phrase by adding extraneous qualifications such as limitations on compensation and requirements to use only premises controlled by the licensee. In any event, CellNet urges the Commission to at least modify its proposed definition so that it does not exclude entities that Congress clearly intended to encompass.

First, the Commission's proposed definition should be revised to make clear that a licensee's

---

[14] 47 U.S.C. § 309(j)(2).

[15] Notice at ¶ 32.

use of the spectrum can qualify as a private internal radio service even if the licensee receives compensation for the goods and services it provides through its internal use of the spectrum, as long as the licensee does not receive compensation for use of the spectrum itself. As previously noted, "[p]rivate internal systems are traditionally operated by licensees . . . for the conduct of the licensee's underlying business."[16] The fact that a company receives compensation for an underlying business activity that requires use of a private internal radio system should not preclude that company from satisfying the definition of a "private internal radio service." Indeed, such a definition would virtually eliminate any commercial enterprise from operating a "private internal" service.

Second, the Commission should modify the proposed definition to delete or clarify the phrase "premises controlled by the licensee." The Commission has set forth no reason why a licensee's private internal radio service network should be prohibited from using facilities or sites that are obtained by contract or lease from the licensee's customers or from third parties. For example, CellNet often leases sites located at utilities' facilities in deploying its MAS network. The Commission should not interfere with how a business decides to gain rights to install the physical components of its network.

B. Public Safety

Section 309(j)(2)(A)(i) limits the exemption to those private internal radio services that "are used to protect the safety of life, health or property." Congress clearly intended this provision to be interpreted broadly because it did not limit the exemption solely to "pure" public safety

---

[16] Notice at ¶ 31.

organizations like police or fire departments or hospital ambulance operations. To the contrary, the legislative history of this provision indicates that non-governmental entities using private internal radio services for public safety purposes may include "utilities, railroads, metropolitan transit systems, pipelines, private ambulances, and volunteer fire departments."[17]

This expansive list of potential qualifiers indicates the intended breadth of the statutory exemption. The wide variety of organizations named in the legislative history also illustrates that Congress was not concerned with the types of organizations subject to exemption but rather the types of functions eligible for exemption. Clearly, it should not matter whether those functions are provided directly by one of the listed entities or by third party providers for the benefit of one of the listed entities. In either case, the licensee should be exempt from auction.

This is essential because, as the Commission is well aware, increasingly both governmental and non-governmental entities out-source important functions to private companies that can provide the same services more efficiently than the organizations could provide themselves in-house. The Commission should take no action which directly or indirectly impedes this trend. To the extent a third party provides over its own network "public safety" communications functions to utilities, pipelines, railroads, and the like, the third party provider should be accorded the same exemption status as the entities listed in the legislative history would receive if they provided these functions in-house.

For example, because utilities were expressly referenced in the statute's legislative history as being eligible for the public safety service exemption, CellNet as the provider of public safety

---

[17] Conference Report at 572.

services to the utilities also must be treated as eligible for the relevant exemption. Maintaining regulatory parity between CellNet and utilities with respect to MAS assignment procedures is essential, lest Commission policies unnecessarily increase the service costs of third party providers and deter utilities from out-sourcing functions which can be performed more efficiently by a third party provider. For these reasons, CellNet supports the Commission's proposal[18] that non-government entities that intend to provide public safety radio services on a contract basis be authorized to apply for auction-exempt spectrum on the same basis as their underlying customers. Either both the entities listed in the legislative history and their third party service providers should be exempt from auctions, or neither should be exempt.

C. Commercially Available to the Public

The Commission also seeks comment on § 309(j)(2)(A)(ii) which requires that exempt radio services "are not made commercially available to the public."[19] This statutory phrase has two components. The first component, "not made commercially available," should be interpreted co-extensively with the Wireless Telecommunications Bureau's prior determinations of which private radio services are "not subscriber based."[20] To the extent a licensee "does not receive compensation specifically for the transmission of communications signals,"[21] it should not be considered as providing "commercially available" service. The fact that the licensee receives compensation for

---

18 Notice at ¶ 38.

19 Id. at ¶ 46.

20 See GTECH Corporation, Memorandum Opinion and Order, 13 FCC Rcd 4290 (Chief, Wireless Telecom. Bur. 1998).

21 Id. at 4295.

its underlying products or services is irrelevant. Moreover, consistent with past practices, the Commission should treat a service as "not commercially available" if a majority of the use fits the criterion.[22]

The other statutory phrase, "to the public," also should be interpreted consistently with Commission precedent. The Commission previously found that if a service is provided exclusively for internal use or is offered only to a significantly restricted class of eligible users, it is made available only on a limited basis to insubstantial portions of the public.[23]

CellNet, for example, satisfies both components of § 309(j)(2)(A)(ii). CellNet's private internal network is not made commercially available to the extent that usage of the network is not offered directly to its utility customers. Moreover, CellNet's highly customized information services generally are limited to one utility in any given area and the few other entities that require a specialized service to collect information from up to hundreds of thousands of remote sites. Companies like CellNet, which make no general offering of its services to any substantial portion of the public, meet the statutory criteria for an exemption.

---

22 See CMRS Second Report and Order, 9 FCC Rcd at 1424 (Commission determined which services were subject to competitive bidding based on whether at least a majority of the use would be for service to subscribers for compensation); Amendment of Part 90 the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making, PR Docket No. 93-144, 11 FCC Rcd 1463, 1535 (1995) (Commission considered majority use of the band in determining whether General Category channels are principally used for subscriber-based services).

23 CMRS Second Report and Order, 9 FCC Rcd at 1440.

V. ENTITIES WHICH USE PRIVATE WIRELESS SPECTRUM EFFICIENTLY SHOULD BE ABLE TO LEASE EXCESS NETWORK CAPACITY ON EVEN AUCTION-EXEMPT FREQUENCIES

To the extent that any entity eligible for the public safety radio service exemption (including utilities and CellNet) can provide statutorily exempt services on a spectrally efficient basis, it also should be allowed to utilize its extra network capacity for non-exempt services, including the lease of capacity on a private carriage basis. Congress clearly did not intend public safety radio services to be spectrum inefficient by reason of their statutory exemption, especially when it was aware that in other proceedings the Commission was employing refarming and other means to promote increased private wireless spectrum efficiency. Indeed, in light of the spectrum shortage currently faced by the private wireless community, the Commission should employ all possible means to ensure that available spectrum is used efficiently.[24]

CellNet proposes that as long as a majority of the spectrum gained through the statutory exemption is used for qualified public-safety functions, the licensee may use its network for non-exempt purposes, including non-public safety private carriage. Such a principal use criterion would be consistent with Commission practice in related spectrum areas.[25] All public safety entities, including governmental entities and utilities, as well as the public at large would benefit from the increased efficiency of these entities' spectrum utilization.

---

24 See Amendment of Part 94 to Authorize Private Carrier Systems in the Private Operational-Fixed Microwave Radio Service, First Report and Order, 57 Rad. Reg. 2d (P & F) 1486, 1507 (1985) (permitting access to excess capacity in the interest of promoting more efficient spectrum utilization).

25 See note 22, supra.

VI. IF THE COMMISSION DECIDES TO IMPLEMENT AUCTIONS FOR PRIVATE WIRELESS SPECTRUM, IT SHOULD EMPLOY SMALLER GEOGRAPHIC LICENSE AREAS FOR ENCUMBERED SPECTRUM AND GRANT LICENSEES WIDE FLEXIBILITY IN CONDUCTING POST-AUCTION TRANSACTIONS

If the Commission decides to employ auctions for all private wireless spectrum — which it should not do — it at least should treat heavily encumbered spectrum bands differently than lightly populated ones. In heavily encumbered bands, relatively few, and relatively small, slivers of white space will be available for potential use; and those slivers likely will be geographically dispersed. If private wireless users are required to participate in auctions in order to obtain more spectrum, incumbent licensees may be interested in bidding, but likely only for areas at the edges of their existing systems or to fill existing holes.

Under these circumstances, it would be more appropriate to use smaller geographic licensing areas like EAs for auctions in encumbered bands rather than larger geographic areas like MTAs. Smaller geographic areas would facilitate the Commission's compliance with § 309(j)(6)(E) of the Communications Act by reducing the likelihood of mutual exclusivity between different bidders, each of which are interested in a different sliver of white space in a large MTA but which can avoid mutual exclusivity if those slivers are in two different EAs. Larger geographic licensing areas, on the other hand, may be appropriate for unencumbered bands, such as 932/941 MHz, where a winning bidder may have a realistic option of deploying a wide area system.

Once the Commission completes any private wireless auctions it holds, the new geographic area licensees should have wide discretion to partition, disaggregrate, and to assign their licenses. This is especially important to geographic licensees who bid on a particular license in order to ensure access to a relatively small area of white space. All private wireless geographic licensees should be

able to engage in partitioning and disaggregation at any time, for any geographic area, and to any entity eligible for a private wireless license. The parties to an agreement also should be allowed to combine partitioning and disaggregation whereby, for example, another party can contract to obtain a license not only limited to a portion of the geographic licensee's service area but limited to only a part of the authorized spectrum.

The Commission also should minimize any build-out requirements, at least for heavily encumbered spectrum. Incumbents may bid on certain licenses because their long-term contracts contemplate the addition of a certain area on the edge of their existing systems sometime in the future. The licensee's customer, however, may not have the funding or otherwise be ready for a rapid deployment of service in the white space. Because the private wireless bands by definition are used primarily for the conduct of the licensee's underlying business, its business needs should prevail over any arbitrarily defined build-out deadline.

VII. THE COMMISSION SHOULD NOT ADOPT A FREEZE ON ASSIGNING NEW PRIVATE WIRELESS LICENSES

The Commission noted that in services where it has transitioned to geographic area licensing and auctions, it has suspended the acceptance of new license applications until such time as it adopts final rules and begins accepting new applications to participate in the auction.[26] The Commission states that the goal of such an application freeze is to deter speculative applications but seeks comment on alternative measures to achieve this goal.[27]

CellNet strongly opposes the adoption of an application freeze for private wireless spectrum

---

26 Notice at ¶ 96.

27 Id. at ¶ 97.

in those frequency bands in which incumbents already have licenses. An application freeze will have a serious adverse effect on the business plans of many operators who require additional spectrum in order to expand existing service areas or whose licenses require major modification in order to provide more efficient or comprehensive service to existing customers. An application freeze would be especially harmful if tied to the completion date of this proceeding. The Commission may need a lengthy period to sort out which private wireless bands are suitable for auction and which entities/ functions are eligible for the public safety radio service exemption. The needs of private wireless licensees should not be put on hold indefinitely.

In particular, CellNet opposes the Commission's action adopting an application freeze for all MAS frequency bands, pending its decision whether to employ geographic licensing and auctions for MAS.[28] CellNet has several pending contracts with its utility customers that require CellNet to expand and/or modify its existing MAS networks to provide public safety information services; and unless the application freeze is modified or waived, CellNet will not be able to fulfill the expansion aspects of those contracts. To the extent the application freeze is intended to deter speculative applications, it should not be applied to situations where agreements are in place requiring the use of MAS networks to provide important safety-related services to utilities.

Indeed, an application freeze intended to deter speculative applications actually will hurt those who consistently made good faith efforts to comply with the Commission's existing licensing procedures. CellNet, for example, files applications for new MAS licenses or major modifications

---

[28] Amendment of the Commission's Rules Regarding Multiple Address Systems, Further Notice of Proposed Rule Making and Order, WT Docket No. 97-81, FCC 99-101, July 1, 1999, at ¶ 32.

when expansions of existing contracts are ready to be implemented. Because of the MAS application freeze, it is now severely disadvantaged as its long-term contracts need to be fulfilled. CellNet believes that it and the other MAS licensees who followed the rules are suffering the consequences to deter the few who might file speculative applications.

In any event, an application freeze is particularly unwarranted for the private wireless services. As previously noted, the Commission has recognized that private internal systems are traditionally operated by licensees that require "highly customized" facilities for the conduct of the licensee's underlying business.[29] Highly customized applications that require site-by-site licensing and frequency coordination are not the likely target of speculators. In lieu of adopting a blanket freeze on applications, the Commission instead could require applicants to show they have an operating business and/or agreements with customers for concrete service applications.

Alternatively, the Commission could adopt abbreviated construction deadlines to ensure that applicants are not seeking licenses simply to warehouse the spectrum. The Commission itself recently stated that it is "reluctant to freeze acceptance of applications without evidence that there is a serious problem that cannot be resolved under current rules and procedures."[30] Although generic build-out requirements would not be suitable if the Commission adopts geographic licenses for the private wireless services, they could be used in lieu of an application freeze as an interim solution to deter speculative applications. Although construction deadlines as short as five months may be

---

29 Notice at ¶ 31.

30 Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Services, Second Memorandum Opinion and Order, PR Docket No. 92-235, 15 Comm. Reg. (P & F) 668, 674 (rel. Apr. 13, 1999).

appropriate in many cases, the Commission should make clear that it would grant applicants a waiver in appropriate situations where wide-area or particularly complex networks involving hundreds or thousands of fixed remote sites are being constructed.

VIII. SPECTRUM USER FEES ARE MORE SUITABLE THAN AUCTIONS IF THE COMMISSION DEEMS IT NECESSARY TO RECOVER SOME REVENUE FROM THE ASSIGNMENT OF NEW PRIVATE WIRELESS SPECTRUM

To the extent the Commission considers itself obligated to generate some revenue for the Treasury from new private wireless assignments, CellNet endorses the Commission's expressed belief that the use of market-based spectrum user fees is a more appropriate mechanism than auctions, especially for bands which are heavily encumbered.[31] Annual spectrum user fees would have the effect of encouraging private wireless licensees to use spectrum more efficiently on an on-going basis, while retaining the site-by-site licensing regime which is more suitable for the private wireless services in general and encumbered bands in particular. CellNet recognizes that Congressional authorization would be required to implement this proposal. A legislative solution should be pursued, however, if the Commission considers this the only means to avoid auctions of already encumbered private wireless bands.

---

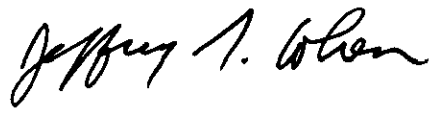
[31] Notice at ¶ 76.

IX. CONCLUSION

For the foregoing reasons, the Commission should take action consistent with the views expressed herein.

Respectfully submitted,

CELLNET DATA SYSTEMS, INC.



Lawrence J. Movshin
Timothy J. Cooney
Jeffrey S. Cohen

WILKINSON BARKER KNAUER, LLP
2300 N Street, N.W., Suite 700
Washington, D.C. 20037-1128
(202) 783-4141

Its Attorneys

August 2, 1999